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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/623,756	09/08/2000	Yoshiyuki Hiraga	20-4746P	6683

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EXAMINER

WILSON, DONALD R

ART UNIT	PAPER NUMBER
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1713

DATE MAILED: 09/12/2003

18

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/623,756

Applicant(s)

HIRAGA ET AL.

Examiner

Donald R Wilson

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 August 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2,4,6-10 and 12-17 is/are pending in the application.
- 4a) Of the above claim(s) 7-10 and 12-17 is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) 1,2,4 and 6

is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☐ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3) ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

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DETAILED ACTION

Status of Application

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 8/1/03 has been entered.
2. Applicant's election with traverse of the inventions of Group I, Claims 1-2, 4 and 6 in Paper No. 6, in response to a restriction requirement due to a lack of unity of invention remains in effect. Claims 7-10 and 12-17 remain withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected invention. The continued traversal of the restriction requirement is not deemed to be persuasive for reasons of record. However, as earlier noted, if the product claims are found allowable, withdrawn process claims which depend from or otherwise include all the limitations of the allowable product claim will be rejoined. See M.P.E.P. § 821.04.

Response to Amendment

3. Applicant's amendment filed 8/1/03, and declaration filed 8/12/03, have been fully considered but are not deemed to be persuasive in overcoming the prior art rejections which are maintained for the reasons discussed below.

Previously Cited Statutes

4. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office Action.

Claim Rejections - 35 USC § 102(a/b)/§ 103(a)

5. **Claims 1-2, 4 and 6 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Schreyer, Bailey or Roura.** The basis of this rejection was stated in Detailed Action § 6-9 of the Office Action of 5/3/02 and has been further discussed in Detailed Action § 5-7 of the Office Action of 12/10/02.

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6. Applicant has amended the claims to recite the claimed copolymer has been "melt kneaded" as opposed to "melt formed". However, this is not deemed to be persuasive in overcoming the prior art as it is a product-by-process limitation, and without evidence to the contrary it isn't seen that the history of having been melt kneaded distinguishes the compositions from the prior art. Further, any structural effect caused by being melt kneaded would depend on both the temperature and time of melt kneading, neither of which are specified.

7. Applicant traverses the rejection based upon the declaration which is alleged to show that compositions comparable to those of Example V of Schreyer do not meet the limitations of the instant claims after melt kneading. The declaration is not deemed to be persuasive for the following reasons.

a. The declaration makes the statement that "--- it is practically impossible to repeatedly wash a copolymer to remove any inorganic materials in the polymer, which may be 'potassium' compounds, if the polymer of Example V was prepared in the same manner as in Example I". However, this is opinion not supported by any evidence. Example I provides a method of polymerization in an aqueous medium with potassium persulfate catalyst to provide a polymer with a specified original viscosity. Why such a polymer cannot be prepared and washed with water to remove inorganic materials as specified in Example V is unclear and is not supported by either evidence or rationale for such a conclusion.

b. The declaration states that, (i) according to the result of the experiments carried out at 260°C in Example V, and (ii) the experiences of the researchers of Daiken Industries, "--- when a polymer is prepared using a polymerization initiator which does not leave any inorganic materials in the polymer and about 5 to 10 ppm of potassium is added to the polymer, the polymer may have substantially the same properties as once prepared using a polymerization having potassium " (underlining added). This is also not deemed to be persuasive because it is not supported by evidence. It is not seen how the results of Schreyer's Example V carried out at 260°C support the claim as the initial -CO₂H concentration of Schreyer are substantially lower than applicant's and show substantially no remaining -CO₂H, -COF or -CF=CF₂ group. It is also

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not known what value to put on the unsupported statement that the polymer may have substantially the same properties as such a statement also means it may not have.

c. It is also not seen, nor is it shown, that the basic potassium hydroxide would be equivalent to the neutral salts that would derive from a potassium persulfate initiator, e.g., potassium sulfate, used in making the composition of Schreyer.

8. The continuing argument that Schreyer does not disclose kneading is not deemed to be persuasive for reasons of record.

9. Applicant traverses the rejection over both Bailey and Roura on the basis that neither reference discloses kneading in the melt. This is not deemed to be persuasive for reasons of record. In regards to any reliance of data presented in the declaration, it is not seen that either Bailey or Roura teach the addition of a basic compound as done in the comparative experiments or that conditions of temperature, time and atmosphere of air and water (see claims 1 of the references) have been shown not to produce a product with the properties of the instant claims.

10. **Claims 1-2, 4 and 6 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Carlson as evidenced by Bro.** The basis of this rejection was stated in Detailed Action §11-12 of the Office Action of 5/3/02 and has been further discussed in Detailed Action § 8-9 of the Office Action of 12/10/02.

11. Applicant traverses the rejection on the basis that neither reference discloses kneading in the melt. This is not deemed to be persuasive for reasons of record. As earlier pointed out, Carlson's Examples VI and VII, provide evidence of complete removal of carboxylic acid end groups from TFE/HFP copolymers. Additionally, treatments of other fluoropolymers under the methods disclosed exemplify volatile indices of less than 25 (Examples I, II and V). There is simply no basis for concluding that the polymers of Carlson must be molten during treatment to adequately remove unstable groups.

12. **Claims 1, 4 and 6 are rejected under 35 U.S.C. 102(a) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over WO'784.** Hiraga'146 is based on the PCT from which WO'784 is derived and is used as an interpretation thereof. Applicant cannot rely upon the

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foreign priority papers to overcome the rejection because a translation of said papers has not been made of record in accordance with 37 CFR 1.55. See MPEP § 201.15.

13. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

14. WO'784 discloses TFE/HFP copolymers with spin densities and volatile indices within the limits of the instant claims and has a publication date of 3/12/98. The polymers are treated in a kneader in the presence of water and no basic component has been added to the polymer (e.g., Example 1). The reactive end-groups have been substantially eliminated. The reference also teaches other methods of effectively removing end groups of the same polymers which would be expected to meet the limitations of the instant claims (see ¶s' 0025 and 0029).

Obviousness Double Patenting Rejection

15. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

16. A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

17. Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

18. ***Claims 1, 4 and 5 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over allowed Claims 1-5 of copending Application No. 10/061,203 (Hiraga'146).*** Although the conflicting claims are not identical, they are not patentably distinct from each other as fluoropolymers within the limitations of the instant claims would result from the process claims of said copending application.

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19. This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Evidence of Common Ownership

20. Claims 1, 4 and 6 are directed to an invention not patentably distinct from allowed claims 1-5 of commonly assigned application 10/061,203, for reasons discussed in the preceding section. Further, said application teaches compositions within the limitations of the instant claims (see Examples 1 and 2).

21. The U.S. Patent and Trademark Office normally will not institute an interference between applications or a patent and an application of common ownership (see MPEP § 2302). Commonly assigned application 10/061,203, discussed above, would form the basis for a rejection of the noted claims under 35 U.S.C. 103(a) if the commonly assigned case qualifies as prior art under 35 U.S.C. 102(f) or (g) and the conflicting inventions were not commonly owned at the time the invention in this application was made. In order for the examiner to resolve this issue, the assignee is required under 37 CFR 1.78(c) and 35 U.S.C. 132 to either show that the conflicting inventions were commonly owned at the time the invention in this application was made or to name the prior inventor of the conflicting subject matter. Failure to comply with this requirement will result in a holding of abandonment of the application.

22. ***A showing that the inventions were commonly owned at the time the invention in this application was made will preclude a rejection under 35 U.S.C. 103(a) based upon the commonly assigned case as a reference under 35 U.S.C. 102(f) or (g), or 35 U.S.C. 102(e) for applications filed on or after November 29, 1999. See MPEP § 706.02(l)(2) II for evidence required to show common ownership.***

Objection to Abstract

23. The abstract of the disclosure is objected to because it contains more than one paragraph. Correction is required. See MPEP § 608.01(b).

Future Correspondence

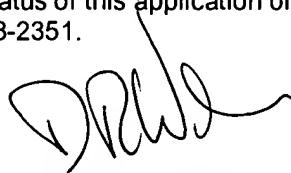
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Donald R Wilson whose telephone number is 703-308-2398.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wu can be reached on 703-308-2450. The fax phone number for the organization where this

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application or proceeding is assigned is 703-872-9306. The unofficial direct fax phone number to the Examiner's desk is 703-872-9029.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 308-2351.

A handwritten signature in black ink, appearing to read 'DRW', with a long horizontal flourish extending to the right.

Donald R Wilson
Primary Examiner
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